

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/055,455	LANE, DEREK GRAHAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	Raymond J. Bayerl	2173	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed 29 November 2004.
2. ☒ The allowed claim(s) is/are 5 - 7; all other claims canceled.
3. ☒ The drawings filed on 23 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

**RAYMOND J. BAYERL**  
**PRIMARY EXAMINER**  
**ART UNIT 2173**

*8 March 2005*

Art Unit: 2173

1. The following is an examiner's statement of reasons for allowance:

The examiner has carefully considered applicant's sole independent claim 5, and is in substantial agreement with the 29 November 2004 response; that the previously applied combination of Bates et al. (US #5,877,766) and Bates et al. (US #5,390,295) under 35 USC 103 is no longer appropriate. While Bates '766 teaches a linked node structure whose object sizes can vary on the basis of parameters associated with the nodes, and while Bates '295 teaches that the "activation" of a display object can vary its displayed "fraction of the output capacity of said output device", the additional limitations concerning "relatedness of said first node to said second node" and the resulting "proximity of the presentation of a first node to the presentation of a second node" that "is substantially proportional to the weight" are not taught nor suggested by the prior art now made of record. At best, the Bates '766 directed graph would be so adjusted by the Bates '295 "activation" tracking as to show relatively-scaled nodes, but not ones that are also repositioned on the basis of a link weight representing relatedness.

During a final search of the relevant prior art, the Examiner noted plural examples of techniques for graph display that contain various individual aspects of applicant's overall claim 5. Chi et al. (US #6,509,898 B2), for example, follows the usage of each node, so as to determine an order in which the nodes will be visited in traversing a graph. However, this does not have the additional limitations of varying nodal size on the basis of such usage, nor does it assign weights that become proportional to proximity.

Shinomi (US #6,437,799 B1) and Martino et al. (US #6,486,898 B1) **do** use a measure of relatedness between nodes for the purpose of assigning display values in the overall graph, <sup>where</sup> ~~with~~ the logical relationship drives the size of a node or its position in Shinomi and prominence is determined on the basis of each node's degree of separation from a reference node in Martino et al. However, these disclosures, while placing a "weight" on the total extent of a link to another node, do not also determine nodal size from the degree of "activation". There is also no motivation to combine such references, in which size is driven on the basis of relatedness, with such references as Bates '295, in which size is then determined based upon usage.

RB

The Examiner finally notes Eick et al. (US #5,835,085), in which both size and position of nodes are controlled in a graph. Eick et al., while positioning nodes by the use of "weight"-assignments to the links, also fails to suggest that "activation" be used as the basis for size assignment—only Statistics drive size, these being values of ongoing variables in the simulation and not the quantity of attention the user pays to the objects.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Bayerl whose telephone number is (571)

Art Unit: 2173

272-4045. The examiner can normally be reached on M - Th from 9:00 AM to 4:00 PM ET.

4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (571) 272-4048. All patent application related correspondence transmitted by FAX **must be directed** to the central FAX number (703) 872-9306.

5. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

  
RAYMOND J. BAYERL  
PRIMARY EXAMINER  
ART UNIT 2173

8 March 2005